



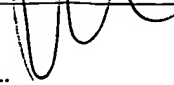
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,269	02/06/2004	Yury Shkolnikov	14227	8668
7590 09/08/2004			EXAMINER	
LISA M. SOLTIS ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE GLENVIEW, IL 60025			TRUONG, THANH K	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/774,269	<b>Applicant(s)</b> SHKOLNIKOV ET AL. 	
	<b>Examiner</b> Thanh K Truong	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites: "at least one shock-absorbing member is freely slidable in said track", but claim 8 recites: "at least one shock-absorbing member is secured to one of said probe assembly". It appears that the terms "freely slidable" and "secured" are contradicted each other. It is unclear is the shock-absorbing member "freely slidable" or "secured".

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagdy (4,483,473).

Wagdy discloses (figures 8 and 9) an apparatus comprising:

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a cylinder body 20;

a reciprocating probe assembly 20, 30, 50 slidably mounted to the cylinder body between a first, extended position and a second, retracted position, the probe assembly and configured for contacting a workpiece; and

at least one shock-absorbing member 40 operationally associated with at least one of the cylinder body and probe assembly for reducing shock load generated during operation of the tool (column 3, lines 65-67); and

a single spring 56 disposed between the probe assembly and the cylinder body and configured for biasing the probe assembly into the first position (as in claim 17).

5. Claims 1-15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nikolich (5,197,646).

Nikolich discloses an apparatus comprising:

a cylinder body 30;

a reciprocating probe assembly 80 slidably mounted to the cylinder body between a first, extended position and a second, retracted position, the probe assembly and configured for contacting a workpiece; and

at least one shock-absorbing member 110 operationally associated with at least one of the cylinder body 30 and probe assembly 80 for reducing shock load generated during operation of the tool (figures 2 and 4).

Nikolich further discloses: the probe assembly includes at least one arm portion 100 configured for sliding relationship relative to the cylinder body, the at least one

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shock-absorbing element 110 disposed between the at least one arm 100 and a corresponding element of the cylinder body 30 for transmitting loads from the probe assembly to the cylinder body;

a substantially perpendicular lip 102 at an upper end for contacting the at least one shock-absorbing element;

the cylinder body defines a track for the slidable relative movement of the probe assembly, and the at least one shock-absorbing member is configured for slidable movement in the track (figures 2 & 4 show the shock-absorbing member 110 moves between arm 100 and cylinder body 30 and the adjacent fins defines the track);

at least one tab 106 for defining an upper limit of movement of the probe assembly; at least one shock-absorbing member is configured for common travel with the probe assembly to the tab (figures 2, 4 & 5); shock-absorbing member is sliding freely on the track and is secured to one of the probe assembly and the tab; shock-absorbing member is configured to be substantially complementary with the path; and is generally cylindrical in shape;

the shock-absorbing member is configured for reducing load forces generated in a combustion chamber and being configured to have sufficient rigidity and resilience;

and Nikolich further discloses (figures 8 & 9):

a cylinder body 204;

a reciprocating probe assembly 220 slidably mounted to the cylinder body between a first, extended position (figure 10) and a second, retracted position (figure 9), the probe assembly and configured for contacting a workpiece; and

a single spring 230 disposed between the probe assembly 220 and the cylinder body 204 and configured for biasing the probe assembly into the first position (as in claim 17); the single spring is a conical spring; and a retaining ring 216 (figure 8).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich (5,197,646).

As discussed above in paragraph 5 of this office action, Nikolich discloses the claimed invention, in which the larger diameter of the conical spring is mounted to the end of the cylinder body 204 and the smaller diameter end is mounted to the retaining ring which is connected to the probe assembly 220.

Applicant's conical spring larger diameter end mounted to retaining ring (which connected to the cylinder body) and a smaller diameter end is mounted to the probe assembly (as recited in claims 16 and 19). However, it appears that Nikolich's arrangement of the conical spring would perform equally well. Accordingly, the conical spring arrangement of the Applicant is deemed to be a design consideration which fails to patentably distinguish over the prior art of Nikolich.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh K Truong whose telephone number is (703) 605-0423. The examiner can normally be reached on Mon-Thurs from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tkr  
August 30, 2004.



Rinaldi I. Rada  
Supervisory Patent Examiner  
Group 3700